PATENT

IN THE WITED STATES PATENT AND TRADEMARK OFFICE

APPLICANTS:

LEONHARTSBERGER ET AL

SERIAL NO.:

10/789,493

GROUP:

1652

FILED:

FEBRUARY 27, 2004

TITLE:

METHOD FOR FERMENTATIVE PREPARATION OF S-

ADENOSYLMETHIONINE

SUBMISSION OF INFORMATION DISCLOSURE STATEMENT OF DR. HOLGER POTTEN

MAIL STOP AMENDMENT Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Dear Sir:

Applicants wish to bring to the attention of the Patent Examiner the attached Information Disclosure Statement, duly signed by Dr. Holger Potten dated April 14, 2004, and the references listed on the enclosed Form PTO-1449 and attached thereto. These references were cited in the Specification of the present application, and in the Office Action of the German Patent and Trademark Office.

It is respectfully requested that the foregoing Information Disclosure Statement be incorporated into the official file of the present patent application.

Respectfully submitted,

LEONHARTSBERGER ET AL

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Attorneys for Applicant

ERF:djp

Encs: Information Disclosure Statement of Dr. Holger Potten and Form PTO-1449 w/copies of (21) references

I hereby certify that this correspondence is being deposited with the U.S. Postal Service as first class mail in an envelope addressed to: Commissioner of Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450, on June 9, 2004.

Maria Guastella



In re application of

LEONHARTSBERGER ET AL.

Serial Number j

10/789,493

Group Art Unit:

1652

Filed: February 27,2004

For: METHOD FOR FERMENTATIVE PREPARATION OF S-

ADENOSYLMETHIONINE

Information Disclosure Statement

Honorable Commissioner of Patents and Trademarks Washington, D.C. 20231

Sir or Madam:

I, Holger Potten, associated with the preparation and prosecution of the aboveidentified application, residing at Neubiberger Straße 17a, 81737 München, Germany, wish to call the attention of the Patent Examiner to the references enumerated on the enclosed PTO Form-1449.

I believe the documents enumerated on the enclosed Form PTO-1449 and attached thereto, are cited in the enclosed application and in the Office Action of the German Patent and Trademark Office and may be material to the examination of the application.

Therefore, it is respectfully requested that the foregoing Information Disclosure Statement be considered by the Examiner and incorporated into the file of this application.

I wish to comment as follows concerning the prior art references enumerated on PTO Form-1449:

EP 0 647 712 A1, cited in the German Office Action as well as in the application, is enlosed.

US 2003/0022322 A1, cited in the German Office Action, is enclosed.

Chemical Abstracts 138: 281 907, cited in the German Office Action, is enclosed.

Chemical Abstracts 138: 286 121, cited in the German Office Action, is enclosed.

Chemical Abstracts 135: 287 538, cited in the German Office Action, is enclosed.

WO 03/008591 A1, cited in the German Office Action, is enclosed.



Schlenk F. and DePalma R.E., "The Preparation of S-Adenosylmethione"; J. Biol. Chem. pages 1037 – 1050 (1957), cited in the application, is enclosed.

Shiozaki S. et al., "S-Adenosyl-L-methionine Production by Saccharomyces sake: Optimization of the Culture Conditions for the Production of Cells with a High S-Adenosyl-L-methionine Content", Agric. Biol. Chem. 53 (12), pages 3269 – 3274 (1989), cited in the application, is enclosed.

US 4,562,149, cited in the application, is enclosed.

GB 1436509, cited in the application, is enclosed.

Greene, R. C., "Biosynthesis of Methionine" in Neidhardt F.C., Escherichia coli and Salmonella typhimurium, Cellular and molecular biology, Second Edition, ASM Press, Washington DC (1996), pages 542 – 560.

Markham et al., "S-Adenosylmethionine Synthetase from Escherichia coli" Journal of Biological Chemistry, no. 19, Issue of October 10, pages 9082 – 9092, 1980, cited in the application, is enclosed.

Park et al., "Enzymatic Synthesis of S-Adenosyl-L-methionine on the Preparative Scale", Bioorganic & Medical Chemistry, vol. 4, no. 12, pages 2179 – 2185, 1996, cited in the application, is enclosed.

Lu and Markham, "Enzymatic Properties of S-Adenosylmethionine Synthetase from the Archaeon Methanococcus jannaschii" The Journal of Biological Chemistry, vol. 277, no. 19, Issue of May 10, pages 16624 – 16631, (2002), cited in the application, is enclosed.

Oden and Clarke, "S-Adenosyl-L-methionine Synthetase from Human Erythrocytes: Role in the Regualtion of Cellular S-Adenosylmethionine Levels", Biochemistry, 22, pages 2978 – 2986 (1983), cited in the application, is enclosed.

Alvarez et al., "Expression of rat liver S-adenosylmethionine synthetase in Escherichia coli results in two active oligomeric forms", Biochem. J., 301, pages 557 – 561, (1994), cited in the application, is enclosed.

Fürste et al., "Molecular cloning of the plasmid RP4 primase region in a multi-host-range tacP expression vector", Gene, 48 pages 119 – 131, (1986), cited in the application, is enclosed.

For JP 2000-139471 A, cited in the application, an English Derwent Abstract is enclosed.

For DE 10247437 A, not yet published and cited in the application, the corresponding English Abstract is enclosed.

For DE 10249642 A, not yet published and cited in the application, the corresponding English Abstract is enclosed.

Mato et al., "S-Adenosylmethionine Synthesis: Molecular Mechanisms and Clinical Implications", Pharmacol. Ther., pages 265 – 280, (1997), cited in the application, is enclosed.

Signed this 44^{44} day of April, 2004.

Dr. Holger Potten

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